State of California AIR RESOURCES BOARD

EXECUTIVE ORDER U-R-12-5

Relating to Certification of New Heavy-Duty Off-Road Equipment Engines

NAVISTAR INTERNATIONAL TRANSPORTATION CORPORATION

Pursuant to the authority vested in the Air Resources Board by Sections 43000.5, 43013 and 43018 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That the following Navistar International Transportation Corporation 1996 model-year engine, with rated power between 175 and 750 horsepower, and exhaust emission control systems are certified as described below for use in heavy-duty off-road equipment:

Typical Equipment Usage: Agricultural Equipment

<u>Fuel Type</u>: Diesel

Engine Family	<u>Liters (C</u>	<u>ubic Inches)</u>	Exhaust Emission Control Systems and Special Features
TNV530R8DASE	8.7	(530)	Turbocharger Charge Air Cooler Engine Control Module

Engine models and codes are listed on attachments. Production engines shall be in all material respects the same as those for which certification is granted.

The total hydrocarbons (THC), carbon monoxide (CO), nitrogen oxides (NOx), and particulate matters (PM) certification exhaust emission standards, in grams per brake horsepower-hour (g/bhp-hr), and the opacity of smoke emission standards, in percent (%), during acceleration (Accel), lugging (Lug), and peak (Peak) modes, for this engine family are (Title 13, California Code of Regulations, Section 2423):

Exha	<u>ust Emissi</u>	ns (g/bhp-hr) NOx PM	Smoke	(%)		
<u>THC</u>	<u>co</u>	<u>NOx</u>	<u>PM</u>	<u>Accel</u>	<u>Lug</u>	<u>Peak</u>
1.0	8.5	6.9	0.4	20	15	50

The THC, CO, NOx and PM exhaust emission certification values, in g/bhp-hr, and the opacity of smoke emission certification values, in percent (%), for this engine family are:

	Exhau	<u>ust Emiss</u>	ion (g/bh	p-hr)	<u>Smoke</u>	<u>Opacity</u>	(%)
Engine Family	<u>THC</u>	<u>co</u>	<u>NOx</u>	<u>PM</u>	<u>Accel</u>	<u>Luq</u>	<u>Peak</u>
TNV530R8DASE	0.1	0.5	6.3	0.04	2	1	4

BE IT FURTHER RESOLVED: That the listed engine models comply with the "Exhaust Emission Standards and Test Procedures--Heavy-Duty Off-Road Diesel Cycle Engines" (Title 13, California Code of Regulations, Section 2423) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the listed engine models also comply with the "Emission Control Labels--1996 and Later Heavy-Duty Off-Road Diesel Cycle Engines" (Title 13, California Code of Regulations, Section 2424) for the aforementioned model year.

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Section 2425 et seq.).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

Executed at El Monte, California this 36 day of February 1996.

R. B. Summerfield

Assistant Division Chief Mobile Source Division

E.O. # U-R-12	>	
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1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY OFF-ROAD DIESEL ENGINES Page _ 1_ of _ 1_.

Manafacturer	Navistar Inte	rnational T	ransportati	on Corp.		Engin	e Family	TNV	30R8D	ASE	
Displacement:	8.7	1	530	Liters /	Cubic Incl	ies		Engine	Configur	ation:	l - 6
All Eng Codes	in Eng Family:	CA	49	50S	X	Cert 1	Test Procedu	res: AR	B Z	K EPA	X
Valves / Ports p	er Cylinder	2 va	lves / cylin	der		Stroke per C	Combustion C	Cycle	4 - str	oke	_
Maximum Rate	ed Power	300	HP	@	2000	RPM	(224	KW)	<u> </u>	2000	RPM
Ignition: C	ompression -	X	Compress	ion with G	low Plug	-	Spark		_		
Fuel Types:	Dedicated :	X Flex-Fi	ıel	Dual-Fuel	G	asoline	Diesel	— _x	M100		
	M85	CNG	LNG	LP	G	Other (sp	ecify)				
Diesel Cert Fue	d: 40 CFR	86.1313-94	- x			Other (sp	ecify)				
Primary Service	e Equipment:	Specialty	(mobile) A	Agricultura	l Equipme	ent					
Exhaust ECS (e.g., MFI, TC,	CAC):	EM	DI TC C	CAC						
				J)	Jse abbrev	iations per	SAE J1930	JUN93)		

Engine Mode (Eng. Code)	Rated HP @ RPM	Fuel Rate @ Rated HP mm^3 / stroke	Fuel Pump & Injector Part No.	ECM / PCM Part No.	EGR Valve Part No.	PTOX / Catalytic Converter
A300	300 @ 2000	(lbs/hr) 164.0 (109.9)	Injectors 1824741C1	ECM 1807383C1 *1807388C1		Part No.
AL300	300 @ 2000	164.0 (109.9)	46	1807382C1 *1807387C1		

Date Issued: 1/18/96

Revisions: *3/22/96 | | | | | |

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